· Page 1 of 25



# INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)

| Atty. Docket No. NAV) 8 | <b>224</b> A           | •               | Serial No. 09/832,                                      | 848           |              |                     |      |                           |
|-------------------------|------------------------|-----------------|---|---------------|--------------|---------------------|------|---------------------------|
| Applicant Richar        | d D. BUCHOLZ et al.    |                 |   |               |              |                     |      |                           |
| iling Date April        | 12, 2001               |                 | Group 3737  |               |              | ,                   |      |                           |
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| $\Lambda$               | 3,983,474              | 09/76           | Kuipers   | 324           | 43B          |                     |      | 1                         |
|                         | 4,182,312              | 01/80           | Mushabac  | 433           | 68           | Ġ                   |      | 1-                        |
|                         | 4,341,220              | 07/82           | Реггу   | 606           | 130          | ğ                   | JAN  | ĺĒ                        |
|                         | 4,608,977              | 09/86           | Brown   | 128           | 303B         | 9                   | _    |                           |
|                         | 4,638,798              | 01/87           | Sheldon et al.  | 128           | 303B         | T Z                 | # 2  |                           |
|                         | 4,651,732              | 03/87           | Frederick   | 128           | 303R         | JOLGGY GENTER R8700 | 2003 | ֚֚֚֚֚֚֚֚֡֝֝֟֝֟֝֟֝֟֝֟֝֟֝֟֝ |
|                         | 4,660,970              | 04/87           | Ferrano   | 356           | ı            | 870                 |      | 1                         |
|                         | 4,701,049              | 10/87           | Beckman   | 356           | 1            |                     |      |                           |
|                         | 4,705,395,             | 11/87           | Hageniers   | 356           | 1            |                     |      |                           |
|                         | 4,705,401              | 11/87           | Addleman  | 356           | 376          |                     |      |                           |
|                         | 4,706,665              | 11/87           | Gouda   | 128           | 303B         |                     |      | ĺ                         |
|                         | 4,709,156              | 11/87           | Murphy  | 250           | 560          |                     |      |                           |
|                         | 4,723,544              | 02/88           | Moore et al.  | 128           | 303B         |                     |      |                           |
|                         | 4,733,969,             | 03/88           | Case et al.   | 356           | 375          | 10                  |      |                           |
|                         | 4,737,032              | 04/88           | Addleman et al.   | 356           | 376          | ω <sub>i</sub> ι    | 17   | PF                        |
|                         | 4,743,770              | 05/88           | Lee   | 250           | 560          | 3700 MAL            |      | F                         |
|                         | 4,743,771              | 05/88           | Sacks et al.  | 250           | 560          | MA                  | 7    | JAK                       |
| \\                      | 4,745,290              | 05/88           | Frankel et al.  | 250           | 560          | 7                   | 1    | ,-                        |
| V                       | 4,750,487              | 06/88           | Zanetti ·   | 128           | 303B         | 001                 |      |                           |
| 4/10                    | 4,753,528              | 06/88           | Hines   | 356           | 1            | 100                 |      |                           |
| aminer ELBN C NU        | ANTS MELLAG            | Et-             | Date Considered   | 131/20        | 22           | in.                 |      |                           |
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| Filing Date April 1 | 12, 2001           |                                       | Group 3737          |               | ··· ·· · · · · · · · · · · · · · · · · |                            |
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| 个                   | 4,764,016          | 08/88                                 | Johanasson          | 356           | 371                                    |                            |
|                     | 4,779,212          | 10/18/88                              | Levy                | 364           | 562                                    |                            |
|                     | 4,782,239          | 11/01/88                              | Hirose et al.       | 250           | 561                                    |                            |
| ,                   | 4,794,262          | 12/27/88                              | Sato et al.         | 250           | 560                                    | T T                        |
|                     | 4,791,934          | 12/20/88                              | Brunnett            | 606           | 130                                    |                            |
|                     | 4,809,694          | 03/07/89                              | Ferrara             | 128           | 303B                                   |                            |
|                     | 4,821,200          | 04/11/89                              | Oberg               | 364           | 474.24                                 |                            |
|                     | 4,822,163          | 04/18/89                              | Schmidt             | 356           | 1                                      |                            |
|                     | 4,825,091          | 04/25/89                              | Breyer et al.       | 250           | 560                                    |                            |
|                     | 4,829,373          | 05/09/89                              | Leberl et al.       | 358           | 88                                     |                            |
|                     | 4,836,778          | 06/06/89                              | Baumrind et al.     | 433           | 69                                     |                            |
|                     | 4,841,967          | 06/27/89                              | Chang et al.        | 128           | 303B                                   |                            |
|                     | 4,875,478          | 10/89                                 | Chen                | 128           | 303B                                   | Y.C                        |
| W                   | 4,931,056          | 06/90                                 | Ghajar et al.       | 606           | 653R                                   | JAN-                       |
|                     | 4,945,914          | 08/90                                 | Allen               | 128           |  | }                          |
|                     | 4,991,579          | 02/91                                 | Allen               | 128           | 653R                                   | HAII 2                     |
|                     | 5,017,139          | 05/91                                 | Mushabac            | 433           | 109                                    | 7002<br>R(                 |
|                     | 5,016,639          | 05/91                                 | Allen               | 128           | 65BR-                                  | om                         |
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\*Examiner.

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| Applicant Richar   | d D. BUCHOLZ et al.                                    |   | •   |                                     |                                |                               |
| Filing Date April 12   | , 2001   |   | Group 3737  |                                     |                                |                               |
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| Examiner Initial*  | Document<br>Number                                     | Date .                                    | Name  | Class                               | Sub<br>Class                   | Filing Date If Appropriate    |
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|  | 5,097,839  | 03/92                                     | Allan   | 128 ·                               | 653.1                          |                               |
|  | 5,107,839  | 04/92                                     | Houdek et al.   | 606                                 | 130X 2                         | 以沿                            |
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|------------------------------|--|----------------------------------|--|---------------|---------------------------|----------------------------|
| Applicant: Ric               | hard D. BUCHOLZ et al.                       |                                  |  |               |                           |                            |
| Filing Date: April 1         | 12, 2001                                     |                                  | Group 3737   |               |                           |                            |
|                              |  | U.S. PATEN                       | T DOCUMENTS  |               |                           |                            |
| Examiner Initial*            | Document<br>Number                           | Date                             | Name   | Class         | Sub<br>Class              | Filing Date If Appropriate |
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|---------------------------|------------------|--|--|---|--|----------------------------|----------------------------|
| Applicant Ri              | chard D. BUCHO   | LZ et al.                                |  |   |  |                            |                            |
| Filing Date Apri          | 1 12, 2001       |  |  | Group 3737  |  |                            |                            |
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| Applicant Richa            | rd D. BUCHOLZ et al.                 |                                       |  |                               |                             |                            |  |  |
| Filing Date April          | 12, 2001                             |                                       | Group 3737   | Group 3737                    |                             |                            |  |  |
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| Applicant Richar     | d D. BUCHOLZ et al.                  |                  |  |                |                    |                            |  |
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| Atty. Docket No. NA  | Atty. Docket No. NAV 8224                 |                                     |   | Serial No. 09/832,848      |                            |                               |  |  |  |
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| Applicant Richar           | d D. BUCHOLZ et al.                     |                                      | ·   |                          |              |                            |  |
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09/832,848 Atty. Docket No. Serial No. NAV 8224 Richard D. BUCHOLZ et al. Applicant April 12, 2001 Filing Date Group 3737 **U.S. PATENT DOCUMENTS** Document Sub Filing Date Examiner Initial\* Number Date Name Class-Class If Appropriate 4,896,673 1/30/90 Rose et al. 4,933,843 6/12/90 Scheller et al. 4,943,296 7/29/90 Funakubo et al. 4,955,891 9/11/90 Carol OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Pascal Sautot, et al., "Computer Assisted Spine Surgery: a First Step Toward Clinical Application in Orthopaedics," 14th IEEE EMBS, pp. 1071-1072, 1992 Christine S. Siegel, "Creating 3D Models from Medical Images Using AVS," Research Paper, N.Y.U. School of Medicine, 4 pages. D.A. Simon, et al., "Accuracy Validation in Image-Guided Orthopaedic Surgery," Research Paper, Canegie Mellon University and Shadyside Hospital, pp. 185-192. Kurt R. Smith et al., "The Neurostation TM-A Highly Accurate, Minimally Invasive Solution to Frameless Stereotactic Neurosurgery," Computerized Medical Imaging and Graphics, Vol. 18, No. 4, pp. 247-256, 1994. Kurt R. Smith et al., "Multimodality Image Analysis and Display Methods for Improved Tumor Localization in Stereotactic Neurosurgery," Annual Conference of the IEEE Engineering in Medicine and Biology Society, Vol. 13, No. 1, pp. 0210, 1991. Kurt R. Smith, et al., "Computer Methods for Improved Diagnostic Image Display Applied to Stereotactic Neurosurgery," Automedica, Vol. 14, pp. 371-382, 1992. Spencer et al., "Unilateral Transplanation of Human Fetal Mesencephalic Tissue into the Caudate Nucleus of Patients with Parkinson's Disease" The New England Journal of Medicine, Vol. 327, No.22, pp. 1541-8, November 26, 1992. Watanabe, "Neuronavigator," Iqaku-no-Ayumi, Vol. 137, No. 6, 4 pages, May 10, 1986 (with translation). Examiner **Date Considered** \*Examiner. Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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| Applicant                 | Richard D. BUC                             | CHOLZ et al.                              |  |  |                           | •            |                             |
| Filing Date A             | orii 12, 2001                              |   |  | Group 3737   | •                         |              |                             |
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| Applicant Richa   | rd D. BUCHOLZ et al.   |                 |                                  |             |              |                            |
| Filing Date Appri | 1 12, 2001   |                 | Group 3737                       |             |              |                            |
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| Applicant Rich            | ard D. BUCHOLZ et al.     |                  |                            |               |              |                          |
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| Applicant Richard                                     | d D. BUCHOLZ et al.  |  |  |  |  |
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| Applicant Richard D. Bl  | UCHOLZ et al.            |  |  |  |  |  |
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| 67                     | DISCLO   |     |          | Filing Date          | April 12, 2001     |  |
| STATEMENT BY APPLICANT |  |     |          | Confirmation Number  | 2372               |  |
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| (,                     |  |     |          | Group Art Unit       | 3737               |  |
| MADONAN CE             |  |     |          | Examiner Name        | E. Mantis Mercader |  |
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